

ABSTRACT OF THE DISCLOSURE

An antenna, permitting the configuration of at least one radioelectric wave beam of at least one fixed wavelength, of the type including at least one transmitting element, preferably of the passive type, arranged in a set of essentially parallel, wave-reflecting wires or bars, made from a photonic band gap (BIP) material and forming a given structure. The given structure includes faults for shaping the at least one beam in a direction as a function of the position and/or the configuration of the faults. The wires or bars and the faults are arranged on a set of N curves which are closed and concentric on a plane, N being greater than or equal to 1 and the transmitting element is arranged within the innermost curve. The curves are preferably circular and the wires/bars can be controlled to pass from a wave-conducting/reflecting state to a transparent state.